CLAIMS:

1. A composition that comprises, consists essentially of, or consists of:

a) a peptide of eight, nine, ten, or eleven contiguous amino acids of a protein of Figure 2;

b) a peptide of Tables VIII-XXI;

c) a peptide of Tables XXII to XLV; or,

d) a peptide of Tables XLVI to XLIX.

2. A protein of claim 1 that is at least 90, 91, 92, 93, 94, 95, 96, 97, 98, or 99% homologous or identical to an entire amino acid sequence shown in Figure 2.

3. A composition of claim 1 wherein the composition comprises a cytotoxic T cell (CTL) polypeptide epitope or an analog thereof, from the amino acid sequence of a protein of Figure 2.

4. A composition of claim 3 further limited by a *proviso* that the epitope is not an entire amino acid sequence of Figure 2.

5. A composition of claim 1 further limited by a *proviso* that the polypeptide is not an entire amino acid sequence of a protein of Figure 2.

6. A composition of claim 1 that comprises an antibody polypeptide epitope from an amino acid sequence of Figure 2.

7. A composition of claim 6 further limited by a *proviso* that the epitope is not an entire amino acid sequence of Figure 2.

8. A composition of claim 6 wherein the antibody epitope comprises a peptide region of at least 5 amino acids of Figure 2 in any whole number increment up to the end of said peptide, wherein the epitope comprises an amino acid position selected from:

a) an amino acid position having a value greater than 0.5 in the Hydrophilicity profile of Figure 5,

b) an amino acid position having a value less than 0.5 in the Hydropathicity profile of Figure 6;

c) an amino acid position having a value greater than 0.5 in the Percent Accessible Residues profile of Figure 7;

d) an amino acid position having a value greater than 0.5 in the Average Flexibility profile of Figure 8;

e) an amino acid position having a value greater than 0.5 in the Beta-turn profile of Figure 9;

f) a combination of at least two of a) through e);

g) a combination of at least three of a) through e);

h) a combination of at least four of a) through e); or

i) a combination of five of a) through e).

9. A polynucleotide that encodes a protein of claim 1.

10. A polynucleotide of claim 9 that comprises a nucleic acid molecule set forth in Figure 2.

11. A polynucleotide of claim 9 further limited by a *proviso* that the encoded protein is not an entire amino acid sequence of Figure 2.

12. A composition of claim 10 wherein the substance comprises a polynucleotide that comprises a coding sequence of a nucleic acid sequence of Figure 2.

13. A polynucleotide of claim 10 that further comprises an additional nucleotide sequence that encodes an additional peptide of claim 1.

14. A 254P1D6B siRNA composition that comprises:

a double stranded siRNA that corresponds to the nucleic acid ORF sequence which encodes the 254P1D6B protein, or corresponds to a subsequence of the ORF,

wherein said double stranded siRNA is 19, 20, 21, 22, 23, 24, or 25 contiguous nucleotides in length.

15. A composition comprising a polynucleotide that is fully complementary to a polynucleotide of claim 9.

16. A method of generating a mammalian immune response directed to a protein of Figure 2, the method comprising:

exposing cells of the mammal's immune system to a portion of

a) a 254P1D6B-related protein and/or

b) a nucleotide sequence that encodes said protein,

whereby an immune response is generated to said protein.

17. A method of generating an immune response of claim 16, said method comprising:

providing a 254P1D6B-related protein that comprises at least one T cell or at least one B cell epitope; and,

contacting the epitope with a mammalian immune system T cell or B cell respectively, whereby the T cell or B cell is activated.

18. A method of claim 17 wherein the immune system cell is a B cell, whereby the activated B cell generates antibodies that specifically bind to the 254P1D6B-related protein.

19. A method of claim 17 wherein the immune system cell is a T cell that is a cytotoxic T cell (CTL), whereby the activated CTL kills an autologous cell that expresses the 254P1D6B-related protein.

20. A method of claim 17 wherein the immune system cell is a T cell that is a helper T cell (HTL), whereby the activated HTL secretes cytokines that facilitate the cytotoxic activity of a cytotoxic T cell (CTL) or the antibody-producing activity of a B cell.

21. A method for detecting, in a sample, the presence of a 254P1D6B-related protein or a 254P1D6B-related polynucleotide, comprising steps of:

contacting the sample with a substance that specifically binds to the 254P1D6B-related protein or to the 254P1D6B-related polynucleotide, respectively, to form a complex; and,

determining the presence or amount of the complex in the sample.

22. A method of claim 21 for detecting the presence of a 254P1D6B-related protein in a sample comprising steps of:

contacting the sample with an antibody or fragment thereof either of which specifically binds to the 254P1D6B-related protein, and when so bound thereby forms a complex; and,

determining that there is a complex of the antibody or fragment thereof and the 254P1D6B-related protein.

23. A method of claim 21 further comprising a step of:

obtaining the sample from a patient who has or who is suspected of having cancer.

24. A method of claim 21 for detecting the presence of a protein of Figure 2 mRNA in a sample comprising:

subjecting the sample to reverse transcription using at least one 254P1D6B cDNA primer whereby cDNA is produced when mRNA is present in the sample;

amplifying cDNA so produced using 254P1D6B polynucleotides as sense and antisense primers; and,

detecting the presence of the amplified 254P1D6B cDNA.

25. A method of claim 21 for monitoring one or more 254P1D6B gene products in a biological sample from a patient who has or who is suspected of having cancer, the method comprising:

determining the status of one or more 254P1D6B gene products expressed by cells in a tissue sample from an individual;

comparing the status so determined to the status of one or more 254P1D6B gene products in a corresponding normal sample; and,

identifying the presence of one or more aberrant gene products of 254P1D6B in the sample relative to the normal sample.

26. The method of claim 25 further comprising a step of determining if there are one or more elevated gene products of a 254P1D6B mRNA or a 254P1D6B protein, whereby the presence of one or more elevated gene products in the test sample relative to the normal tissue sample indicates the presence or status of a cancer.

27. A method of claim 26 wherein the cancer occurs in a tissue set forth in Table I.

28. A composition that modulates the status of a cell that expresses a protein of Figure 2 comprising:

a) a substance that modulates the status of a protein of Figure 2, or b) a molecule that is modulated by a protein of Figure 2.

29. A composition of claim 28, further comprising a physiologically acceptable carrier.

30. A pharmaceutical composition that comprises the composition of claim 28 in a human unit dose form.

31. A composition of claim 28 wherein the substance comprises an antibody or fragment thereof that specifically binds to a protein of Figure 2.

32. An antibody or fragment thereof of claim 31, which is monoclonal.

33. An antibody of claim 31, which is a human antibody, a humanized antibody or a chimeric antibody.

34. A non-human transgenic animal that produces an antibody of claim 31.

35. A hybridoma that produces an antibody of claim 32.

36. A composition of claim 28 wherein the substance reduces or inhibits the viability, growth or reproduction of a cell that expresses a protein of Figure 2.

37. A composition of claim 28 wherein the substance increases or enhances the viability, growth or reproduction of a cell that expresses a protein of Figure 2.

38. A method of delivering a cytotoxic agent or a diagnostic agent to a cell that expresses a protein of Figure 2, said method comprising:

providing the cytotoxic agent or the diagnostic agent conjugated to an antibody or fragment thereof of claim 31; and,

exposing the cell to the antibody-agent or fragment-agent conjugate.

39. A composition of claim 28 wherein the substance comprises a polynucleotide that encodes an antibody or fragment thereof, either of which immunospecifically binds to a protein of Figure 2.

40. A composition of claim 28 wherein the substance comprises a) a ribozyme that cleaves a polynucleotide having a 254P1D6B coding sequence, or b) a nucleic acid molecule that encodes the ribozyme; and, a physiologically acceptable carrier.

41. A composition of claim 28 wherein the substance comprises human T cells, wherein said T cells specifically recognize a 254P1D6B peptide subsequence in the context of a particular HLA molecule.

42. A method of inhibiting growth, reproduction or survival of cancer cells that express a protein of Figure 2, the method comprising:

administering to the cells the composition of claim 28, thereby inhibiting the growth, reproduction or survival of said cells.

43. A method of claim 42 of inhibiting growth, reproduction or survival of cancer cells that express a protein of Figure 2, the method comprising steps of:

administering to said cells an antibody or fragment thereof, either of which specifically bind to a 254P1D6B-related protein, thereby inhibiting the growth, reproduction or survival of said cells.

44. A method of claim 42 of inhibiting growth, reproduction or survival of cancer cells that express a protein of Figure 2, the method comprising steps of:

administering to said cells a 254P1D6B-related protein, thereby inhibiting the growth, reproduction or survival of said cells.

45. A method of claim 42 of inhibiting growth, reproduction or survival of cancer cells that express a protein of Figure 2, the method comprising steps of:

administering to said cells a polynucleotide comprising a coding sequence for a 254P1D6B-related protein or comprising a polynucleotide complementary to a coding sequence for a 254P1D6B-related protein, thereby inhibiting the growth, reproduction or survival of said cells.

46. A method of claim 42 of inhibiting growth, reproduction or survival of cancer cells that express a protein of Figure 2, the method comprising steps of:

administering to said cells a ribozyme that cleaves a polynucleotide that encodes a protein of Figure 2, thereby inhibiting the growth, reproduction or survival of said cells.

47. A method of claim 42 of inhibiting growth, reproduction or survival of cancer cells that express a protein of Figure 2 and a particular HLA molecule, the method comprising steps of:

administering human T cells to said cancer cells, wherein said T cells specifically recognize a peptide subsequence of a protein of Figure 2 while the subsequence is in the context of the particular HLA molecule, thereby inhibiting the growth, reproduction or survival of said cells.

48. A method of claim 42, the method comprising steps of:

administering a vector that delivers a nucleotide that encodes a single chain monoclonal antibody, whereby the encoded single chain antibody is expressed intracellularly within cancer cells that express a protein of Figure 2, thereby inhibiting the growth, reproduction or survival of said cells.